

NOTEWORTHY GRASSES FROM MEXICO¹

Alan A. Beetle, Range Management Section, University of Wyoming,
University Station, P. O. Box 3354, Laramie, Wyoming 82071

In 1971 the Range Management Section of the University of Wyoming published the first mimeographed issue of CONTRIBUCIONES AL ESTUDIO DE LAS GRAMINEAS DE MEXICO. At this time (November, 1973) there are eight issues, each published in both Spanish and English, concerning various aspects of Mexican grass taxonomy and ecology. Some of the grasses mentioned in this paper may be found treated in greater detail in these Contributions. All the collections mentioned hereafter are in the Range Management Herbarium at the University of Wyoming.

ALLOLEPIS TEXANA (Vasey) Soderstrom and Decker has been reported from Coahuila, Chihuahua and Durango (Madrono 18:33-39. 1965). To these Mexican states may be added Tamaulipas, based on Beetle M-536, from the beach at Tampico, collected April 19, 1962.

ARISTIDA PANSA Woot. & Standl. var. DISSITA (Johnston) comb. nov. based on *Aristida dissita* Johnston, Jour. Arnold Arboretum 24:401. 1943.

As Johnston says "differs in having the spikelets spreading from the branch and hence very loosely disposed", a character which can serve for the separation of specimens of A. pansa from A. pansa var. dissita, both in the herbarium and in the field, but hardly a character to distinguish species.

ARUNDO DONAX L.

Two tall grasses are conspicuous features of ditches and waterways throughout Mexico. These have both been called "carrizo" but current usage seems to tend to reserve the name carrizo for Arundo donax, the introduced species. The native Phragmites australis (Cav.) Trin. (Phragmites communis Trin.) is called "carricillo".

Much less commonly one may hear the names "canaveral" (Arundo donax) or "soccos" (Phragmites communis). In English speaking countries these are called respectively "giantreed" and "common reed".

BROMUS MARGINATUS Nees (Mountain brome) was collected in the State of Nuevo Leon, from Cerro Potosi, west of Galeana, in the higher open forests of pine and Pseudotsuga macroglumis, March 25, 1962, A. A. Beetle M-467. This species is rare in Mexico and should not be confused with the common B. carinatus Hook. & Arn.

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BROMUS WILLDENOWII Kunth var. LASIOPHYLLUS (Goiran) comb. nov.
Bromus schraderi var. lasiophyllus Goiran, Bull. Soc. Bot.
Ital. 1907:6. 1907.

Ceratochloa unioloides var. lasiophylla (Goiran) Fiori, Nuov.
Fl. Anal. Ital. 1:150. 1923.

The variety differs from the species in having hairy leaf sheaths. The species is introduced in Mexico in the States of Baja California Norte, Coahuila, Nuevo Leon, Durango, Hidalgo and Mexico.

CENCHRUS LONGISPINUS (Hack.) Fern. (longspine sandbur) was collected in the States of Tamaulipas, on the beach at Tampico, April 9, 1962, A. A. Beetle M-538. Apparently Mexican collections are rare.

CENCHRUS PALMERI Vasey

The color difference in burs of Cenchrus palmeri Vasey was noted by Vasey in 1892 as follows "bearing yellow or purple spines." This difference is confirmed by DeLisle (1963, Taxonomy and distribution of the genus Cenchrus, Iowa State Jour. Sci. 37:259-351) "However, infrequent variants occur in which the entire bur may have a yellowish color". According to DeLisle the type is purplish (Palmer 689, from Guaymas, Sonora) but was collected "along with specimens of the yellow-colored form" (see also Hitchcock, A. S. and A. Chase, 1920. Revisions of North American Grasses. Contrib. U. S. National Herb. 22: pgs. 74-76).

The "infrequent" as applied to the yellow color variant is apparently based on the fifteen collections cited. After making eighteen collections in Baja California Sur, it seems that the purple form is the one that is infrequent, at least in this Territory.

Usually all the plants in a stand (16 out of 17 locations) were found to be uniform in regard to the color of the burs. It would appear that finding the two forms together, as at the type locality, is unusual. At the one locality in the Territory of Baja California Sur where the two forms were growing together, the plants were easily separated. All the burs on a single plant were purple, or all the burs on the plant were yellow.

A second equally striking variation occurs in the size of the burs. In Baja California Sur the commonest form has a small round bur less than 10 mm in diameter. Purple burs of this size were encountered only once. Larger burs, also usually round when mature, and more than 10 mm in diameter, may be green or purple, but the large purple form is less common.

ERIONEURON NEALLEYI (Vasey) Tateoka var. GRANDIFLORUM (Vasey) comb. nov. Based on Triodia grandiflora Vasey, U. S. Natl. Herb. Contrib. 1:59. 1890. Sieglingia avenacea var. grandiflora L. H. Dewey,

U. S. Natl. Herb. Contrib. 2:538. 1894.

As the number of collections increases the similarities between E. grandiflorus and E. nealleyi become more apparent.

FESTUCA ARIZONICA Vasey should be included in the Mexican flora based on the type of Festuca pinetorum Swallen and a collection, Beetle M-473, both from the State of Nuevo Leon. Festuca pinetorum Swallen should be treated as a synonym of Festuca arizonica Vasey.

LYCURUS PHLEOIDES HBK var. GLAUCIFOLIUS Beal, Grasses N. Amer. 2:271. 1896.

This name is based on "Mexico, Pringle 426, Texas, Havard, Nealley". Collections throughout the northern part of the range of Lycurus phleoides match the types in the U. S. National Herbarium, and differ from the southern var. phleoides in having an antrorsely scabrous awn-like projection at the tip of the leaf. These projections vary from 1 to 6 mm in length dependent upon the population but are consistently present in the United States (southern Utah and southern Colorado southward to western Oklahoma, western Texas, New Mexico and Arizona) and northern Mexico (Sonora and Chihuahua). This character, coupled with the glaucous appearance of the leaf blade originally noted by Beal define a distinct geographic variety. Mexican collections of var. glaucifolius Beal include Sonora, at El Coyote, Beetle M-2005; Sonora, south of Nogales, Beetle M-1906; Chihuahua, at La Campana, Beetle M-2006.

PARAPHOLIS INCURVA (L.)C. E. Hubb. (sicklegrass) collected in the State of Baja California Norte, twice, once inland, Beetle M-2796, near La Mission, and once on the coast, Beetle M-2853, the beach at Rosarita. These are the first reports for Mexico.

PASPALUM CONJUGATUM Bergius var. parviflorum Doel in Martius Flora Bras. 2:55. 1877. Except for the small spikelets 1.5-1.6 mm long this plant is little different from var. conjugatum. However, the whole plant is nearly glabrous. Distributed from Florida to Uruguay and Bolivia; Hawaii; Malaysia. Mexican collections include Tamaulipas, along Rio Guayaleho, Beetle M-730 and Guerrero, south of Acapulco, Beetle M-297. Paspalum conjugatum Ber. var. pubescens Doell also occurs in Mexico, Veracruz, Tecolapa, Beetle M-1309 and San Luis Potosi, vicinity of Ciudad Valles, Beetle M-727.

PASPALUM FIMRIATUM HBK (Gazon paspalum) was collected on January 22, 1971, in the State of Yucatan, in the vicinity of Chichen-Itza, A. A. Beetle M-892, and appears to be the first report for Mexico. Whether this grass is native or introduced is uncertain.

STIPA LEPIDA Hitchc. was reported by Hitchcock (1925) to occur from California to Baja California. (Hitchcock, A. S. 1925. The North American species of Stipa. Contrib. U. S. National Herb. 24:215-262). Reeder (1967, Notes on Mexican Grasses VI. Miscellaneous chromosome numbers. Bull. Torrey Bot. Club 94:1-17.) reports S. lepida from "Hidalgo: w. of Pachuca" based on his collection number 4298 and Reeder reports the 2 n chromosome number as 46. This record is based on a collection of Stipa eminens Cav. for which Gould (1966, Chromosome numbers of some Mexican grasses. Canadian Jour. Botany 44:1683-1696) has already reported the 2 n chromosome number as 46 for Mexican material from San Luis Potosi. The distribution of Stipa lepida as reported by Hitchcock should remain unchanged.

AN UNUSUAL FLORIDA PIPEWORT

Harold N. Moldenke

ERIOCAULON LINEARE var. GIGAS Moldenke, var. nov.

Haec varietas a forma typica speciei recedit statura valde robustior, foliis usque ad 30 cm. longis, vaginis 15--18 cm. longis 4--5 mm. latis, pedunculis 30--55 cm. longis 3--5 mm. latis, et capitulis 1 cm. vel ultra in diametro.

The type of this strictly aquatic variety was collected by Roland M. Harper (no. 85) in two feet of water at the mouth of the Yellow River, Santa Rosa County, Florida, on September 19, 1910, and is deposited in the Britton Herbarium at the New York Botanical Garden. The typical form of E. lineare Small is not known to grow in deep water and has a very different general aspect. The variety reminds one much of the deep-water forms of E. pellucidum Michx. but the very dark-gray color of the flowering-heads remind one of the small dark heads of E. parkeri B. L. Robinson, a littoral form of E. pellucidum. The elongated peduncles are reminiscent of those of E. melanocephalum var. longipes Griseb.